Assessment of Pedagogical Practices of University Teachers in the Context of Experiential Learning

Dr. Marium Din[1] & Samra Afzal[2]

Abstract

The present study was conducted to explore the extent to which university teachers are using experiential pedagogies and how much importance they attach to experiential learning. All the university teachers of Islamabad constituted the population of the study whereas sample size consisted of one hundred and fifty (59male and 91female) teachers. A questionnaire designed by the researchers was used to collect data from respondents. The collected data were analyzed through mean scores standard deviations, t-test, and one way ANOVA .Findings revealed that university teachers are practicing experiential pedagogies in teaching-learning process to moderate level and are aware about importance of experiential learning over traditional learning. But due to time constraints and strict schedules/time tables they cannot fully introduce experiential learning in their classrooms. There is need to train university teachers in experiential pedagogies so that they can proficiently engage students in experiential learning through collaborative and practical activities rather than just depositing knowledge in the minds of students.

Key Words: Experiential Learning, Pedagogy, Assessment, University Teachers

Introduction

Didactic methods are most prevalent methods of teaching in almost all faculties, disciplines and programs at higher education level. This phenomenon is not only observed but it is proven fact. Lecture method is one of the most vivid and obvious examples of didactic approach. It can also be termed as one-size-fits all approach to teaching. It is considered a standard and does not accommodate a wide array of individual differences. Lecture method implies the same methodology for all the learners. The teacher engages all the learners in the teaching-learning process by applying same methods which are same for

Assistant Professor, Department of Education, NUML, Islamabad[1]

all the learners. The teacher is considered the sole distributor of learning and successful learning is considered that learning that revolves around the subject –matter which is found in textbooks, and handouts. Lecture method does not give any consideration to the pupils' diversity in terms of personality, learning preferences, intellectual aspects and many other aspects which have dominant impact on students' learning. The most detrimental effect of such approach is the loss of the interest of the learner after certain duration of time which results in a decline in the absorption rate of the learners. In spite of various apparent disadvantages of lecture method the vast majority of teachers still use it in their higher level classes. Out of many reasons one reason is that teachers are only trained in lecture method and they have their mastery in it. They are familiar with other methods and try to use them but at their own. They do not have any formal training for the application of experiential methods in teaching and learning process. The students taught through traditional one-size-fits all methods memorize the content, facts, principles, methods and techniques and reproduce them in examinations, get good grades and complete their degrees. When these graduates enter into their practical fields, they face a great amount of difficulty in getting through the technical and practical aspects of the job. The only reason is lack of experiential learning approach in the educational institutions. Although there are many subjects or disciplines where practice is very much essential but it is not provided as rigorously as it is demand of the course or subject. Along with that students are not exposed to real world problems during their studies and their critical thinking is not enhanced much due to certain constraints.

Now in the competitive globalized world the demands of professions are changing day by day. It demands such type of human resources which are fully equipped with modern trends and technologies are fully able to communicate with the world and are able to give maximum profit to them.

Such type of demands can only be fulfilled through engaging the learners in practical and collaborative activities during education. Wurdinger & Carlson (2010) assert that the major reason of avoiding such methods is lack of training in experiential methods. Moreover, the teachers do not know that how effective are experiential methods over traditional methods. One of the important element of the experiential learning is the direct involvement of students in the learning process (Kendall et al., 1986)

The world is changing day-by-day and the demands of the present day are becoming multifold and multidimensional. In such type of perspective the society demands an education system where the learners become competent and efficient to meet the challenges of not only the present world but of future requirements also. In such type of scenario one-size-fits all approaches to learning cannot work successfully. It demands the education that is based on individuals'' experiences and considers the individual differences at top most priority. The research study was carried out to:

1. Explore the extent to which university teachers use experiential pedagogies in teaching-learning process.
2. Find out opinion of university teachers about experiential learning.
3. Investigate the differences in the use of experiential practices due to different demographics.

The null hypotheses which assisted to start the study were.

1. Male and female university teachers equally use experiential pedagogies.
2. University teachers of different ages equally employ experiential pedagogies.
3. University teachers with different qualifications equally use experiential pedagogies.
4. University teachers of different faculties equally use experiential pedagogies.

5. University teachers with different positions equally use experiential pedagogies.

6. University teachers with different experience level equally use experiential pedagogies.

Literature review

Experiential learning is one of the many forms of constructivism. According to Constructivism every individual creates its own learning. Every person has his/her unique life experiences which have a significant impact on his/her learning. The interface between learner and environment results in experiential learning. Constantly learning is readjusted and modified through a continuous interaction between the learner and his surroundings. Learning is not inert it is an active process. Kolb (1984) emphasizes on the holistic nature of learning that demands a full engagement of the learner in the teaching-learning process.

There are various terms in vogue that underscore student-centered and activity-oriented learning. They have one thing in common that is the learner which is considered a part and parcel of the learning process. It may be Activity- based learning, action-oriented learning, experience-based learning, active learning, discovery-learning through action, learning through experience, collaborative learning, active learning, learning through problem-solving are all versions of experiential learning. Experiential learning is learning of the students, for the students and by the students in a conducive and highly interactive environment. Experiential learning differs to didactic approaches to learning in a way that didactic approaches are mostly subject-centered and give supremacy to teachers rather than the learner. Whereas, experiential learning considers the teacher a person who just paves the way for students 'learning and gives a proper direction to learning.

Kolb is a renowned organizational behaviorist who has proposed an experiential learning model that is cyclical in nature and contains different modes of modes of perceiving and transforming experiences. These four modes of experience are concrete experience, reflective observation, abstract generalization, and active experimentation. The first step of experiential learning is concrete experience. It is followed by reflective observation. Reflective observation gives way to abstract generalization. These generalizations assist the individual to do active experimentation in the new context. This cyclical process keeps the learner in the process of learning and relearning. These learning modes produce four learning styles which are divergent, assimilative, convergent, and accommodative learning styles. Divergent learning style is a combination of concrete experience and reflective observation. Whereas, reflective observation and abstract generalization constitute assimilative learning style. Convergent learning style is created through interaction between abstract generalization and active experimentation. Accommodative learning style is the result of the interaction between active experimentation and concrete experience. Kolb proclaims that effective learning can only be taken place if variant learning styles are focused in the teaching-learning process (Kolb, 1984).

Contrary to traditional learning, the experiential learning conceives learning as a process rather than an outcome. The exponents of experiential learning consider learning as a means to an end. Whereas lecture based learning or traditional learning focuses on a learning that is an end in itself. Experiential learning is a continuous process of modification as a result of its interaction with the environment. Traditional learning approaches consider learning as a linear process that starts and ends. Experiential learning emphasizes on relearning. There is reciprocity between the pupil and his environment. It pays full attention to the process of learning. Many theorists

and psychologists including John Dewey suggest and prioritize the process over the product of learning (Kolb, 1984). Experiential learning methods encourage the students' creativity in new directions and let the students set their own pace of learning (Rea,2014). Experiential learning paves the way for an independent learning where students learn individually. In this way students are prepared not only for the local world but for a greater globalized world also. Students become self-regulating and independent learners by relying on their own abilities and finding the implications of their own learning. In experiential learning pupils continuously re-evaluate their pre-existing view about world when they enter into a multifarious and unknown environment (Rea, 2014). They accept responsibility for their own learning while learning through basic skills of reading, writing, speaking, and researching. Teachers are only there to channelize the learning of pupils in an accurate direction. The rest of the work is done by the pupils themselves. Students acquire a valuable experience in their field of study when they actively participate in projects, internships, physical interaction, activity-based learning, and many other means of experiential learning. Rea (2014) critically analyses traditional classroom and asserts that traditional classroom does not ensures well-rounded education of the learner. One of the many reasons is that the curriculum and schedules in traditional systems are highly constant and are determined by teacher and identical for all the learners from setting the goals content, reading, syllabus to the evaluation. Students are supposed to listen to the lectures in the class, complete their home tasks and get ready for the tests. The professor determines the goals, content and evaluation procedures. Such types of measures only assure the good understanding of the material acquisition of good grades in the examination. Differing to this system of traditional teaching-learning is experiential learning that provides a maximum opportunity for a comprehensive and holistic education, that incorporates all areas of

pupils' development including physiological, cognitive, and psychological development.

Ebbinghaus cited in Kishore (2012) describes learning curve and defines relationship of memory and time. Kishore compare experiential learning with traditional learning and describes that with the passage of time lecture absorbing rate reduces. It may be with 100 percent absorption rate or memory on first day, and then it goes on reducing constantly and there are the chances that at the thirtieth day it may only remain 2-3 percent. Educators may overcome this problem by focusing on experiential learning. Kishore asserts that individuals learn more when the philosophy of experiential learning is followed that states that individuals learn more while doing a task. Additionally, Kishore also relates experiential learning with the learning of the future. He says that Repetitive learning that is also called rote learning is essential component of traditional classroom does not fulfills the requirements of higher education in this era for the reason that it decreases the interest of the learner in the subject and therefore it does not have a long-lasting impact on the learner. In the contrary to this experiential learning escalates the learners' interest by accelerating the interest of the learner and thus enhances absorption rate. Experiential learning improves critical thinking of the learners though collaborative and hands-on activities.

Weltman and Whiteside conducted a study in which they compared active learning methods with traditional methods in terms of their effectiveness in a course of business statistics at university of Texas at Arlington. They employed three types of methods which were namely traditional lecture method, fully active learning workshop, and a hybrid method. It was revealed from the findings that active learning method increases learning of weak students (Weltman and Whiteside, 2010) Calas (1979) also suggest a rise in the cumulative percentage of the students at higher education level in the light

of her research study's findings which was conducted to compare the students' cumulative percentage in both traditional methods and experiential methods in a basic management course in University of Peurto Rico. She found significantly high effect of experiential learning on the students' cumulative percentage as compared to traditional pedagogy. Experiential learning is as comforting, enjoyable and safe for the learners. Learners actively engage themselves in the learning process (Estes, 2004).The students are engaged in real life learning opportunities where they have a simulated environment that is quite safe and hazards free. The result is that students are prepared for professional life more aptly than the traditional system of education.

Experiential learning is creates a link between theory and practice. According to Ruhanen (2005) experiential learning also reduces the gap among theory and practice. As traditional learning just acquaints the learner with the knowledge or theories suggested by other persons, but experiential learning actually brings those theories into real life with hands-on activities for the learners. Simulations, role play, and problem-solving methods are examples of such experiential pedagogies which help the learners to reduce the gap between theory and practice. Experiential learning is based on research oriented pedagogies and places the learners in such a situation where they employ problem-solving methods and check systematically that which theory is applicable in that particular problem. Experiential learning stimulates enjoyment and cooperation among learners through gearing a positive environment for learning. Specht and Sandin conducted a study in an undergraduate accounting class at Trinity University. The purpose of the study was compare the effects of an experiential learning exercise and was compared with another class where the students were taught through lecture method. A significant difference was found between traditional lecture class and experiential class in terms of students' enjoyment and cooperation. Those

students of experiential learning exercise exhibited more enjoyment and cooperation as compared to those students which were taught through lecture method (Specht and Sandin, 1990).

Experiential learning results in high rate of return on investment as compared to traditional learning. Because it enhances students' interest and involvement and therefore increases retention rate. According to Dressler, Cedercreutz, and Pacheco (2011) experiential learning definitely enhances the learning outcome of students. Experiential learning accelerates a more positive attitude of pupils towards learning. Pugsley and her associates conducted an experimental research in a nursing school. The rationale behind this study was to increase a positive attitude towards nursing research. There were two groups in the study. One group that was controlled group was taught nursing research through traditional method and the experimental group was taught through interactive instruction as an experiential methods. The findings revealed a more positive effect of experiential interactive instruction on students attitude towards nursing research than the traditional course of nursing research (Pugsley, et. al, 2003).

Research Methodology

As the research study was carried out to know the extent to which university teachers are incorporating experiential pedagogies in their classrooms, it was necessary to get the viewpoints of university teachers about experiential approaches and methods they employ in teaching-learning process. All the teachers teaching at university level in Islamabad, Pakistan constituted population of the study. The study was delimited to only four Faculties which were Faculty of Management sciences; Faculty of Social Sciences; Faculty of Languages; and Faculty of Engineering and Computer sciences. Sample of one hundred and fifty university teachers (59 males and 91 females) was drawn from four faculties through convenient sampling.

Instrument

Data was collected through self-designed questionnaire. It was based upon different characteristics of experiential learning which were student-focused learning, process-based learning, real world learning, individualized learning, and critical thinking. Along with that the questionnaire also included items related to different experiential methods and their usage in teaching-learning process. A demographic form was also included to explore the impact of demographic variables in the use of experiential pedagogies. Five-point Likert scale ranging from strongly Disagree to strongly agree was used in order to know the extent to which university teachers use experiential pedagogies in teaching –learning process. Whereas dichotomous scale Yes/ No) was employed to get the university teachers' assessment about their own selves as experiential pedagogues. Open ended questions were also included in the questionnaire to get information about personal experiences of teachers related to student-focused learning; process-based learning; learning experiences which have connection with real world; and enhancement of critical thinking. They were also asked about those special experiential activities which they use in their classroom for ensuring maximum involvement of students. The purpose of including open –ended questions was also to cross-validate the responses and getting a wealth of knowledge for strengthening discussion about experiential learning.

Data was collected through personal visits to the respondents. The researcher approached the teachers, told them the purpose of the study and then requested them to provide their valuable responses about experiential methods and strategies. Data was analyzed through descriptive statistics (mean and standard deviation); t-test, and One way ANOVA in terms of gender, age, Faculties, academic qualification, experience leve;, and position. Statistical Package for Social Sciences (20) was employed for the analysis.

Results

Table 1: University Teachers' views about their own classroom.

Factors/ Characteristics	N	Mean	Std. Deviation
Student-focused Learning	150	3.7450	1.68353
Process-based Learning	150	3.9356	.52909
Learning connected with real world	150	4.0133	.47638
Individualized Learning	150	3.3400	.69107
Critical Thinking	150	3.9427	.46188
Use of Experiential Methods	150	2.9800	.75946

Five –point Likert Scale ranged from 1= strongly disagree to 5= strongly agree was used to get the responses. Results revealed that teachers were using the techniques of student-focused learning, process-based learning, individualized learning and critical thinking moderately high. Teachers' frequency of using the learning in context of real world context was high. Teachers' frequency of using experiential methods were found low.

Table 2 University Teachers assessment about themselves as pedagogy

	Yes (F/ %)	No (F/ %)
Experiential Pedagogues	120/80%	30/20%

Dichotomous scale 1= Yes, and 2= No was used to know the teachers' assessment about their own selves as experiential pedagogues. Majority of the teachers agreed that they consider themselves as experiential pedagogue.

Table 3 Gender-wise Mean difference in the use of experiential pedagogies

	Mean	t	Sig
Experiential Pedagogies	M(3.81) F (3.81)	0.038	0.970

p value is significant at <0.05 level of significance

The null hypothesis that Male and female university teachers equally use experiential pedagogies is accepted as both male and female university teachers use experiential pedagogies.

Table 4 Age- wise Mean difference in the use of experiential pedagogies

	Mean	F	Sig
Experiential Pedagogies	21-30 yrs (3.62) 31-40 yrs (3.77) 41-50 yrs (3.58) 51-65 yrs (3.72)	.792	.503

p value is significant at 0.05 level of significance

The null hypothesis that university teachers of different ages equally employ experiential pedagogies is accepted. No significant difference was found in the use of experiential pedagogies due to age difference. Although no difference was found but teachers who fall under the category of 31-40 years were slightly higher in use of experiential pedagogies.

Table 5 Qualification- wise Mean difference in the use of pedagogy.

	Mean	F	Sig
Experiential Pedagogies	B.A/ B.Sc(Honors) (3.69) M.A/ M.Sc(3.58) M.Phil/M.S(3.78) Ph. D (3.52)	1.782	.159

p value is significant at <0.05 level of significance

The null hypothesis that university teachers with different qualifications equally use experiential pedagogies is accepted. There is no significant difference found in the use of experiential pedagogies of faculty members with different qualifications. Teachers with different qualification were using the experiential pedagogies irrespective of their qualification.

Table 6 Faculty- wise Mean difference in the use of experiential pedagogies.

	Mean	F	Sig
Experiential Pedagogies	FMS (3.70) FSS (3.65) FL (3.81) FE & CS (3.75)	.492	.689

P value is significant at <0.05 level of significance.

There is no significant difference found in the use of experiential pedagogies in different faculties. Therefore the null hypothesis that University

teachers of different faculties equally use experiential pedagogies is accepted. So, university faculties were using the experiential learning irrespective of their faculties.

Table 7 Position- wise Mean difference in the use of experiential pedagogies

	Mean	F	Sig
Experiential Pedagogies	Lecturer (3.71)	.948	.442
	Assist Professor (3.7)		
	Associate Professor (4.3)		
	Professor (3.5)		

p value is significant at <0.05 level of significance

The null hypothesis that university teachers with different positions equally use experiential pedagogies is accepted. There is no significant difference found in the use of experiential pedagogies among university teachers of different positions.

Table   8 Experience- wise Mean difference in the use of experiential pedagogy

	Mean	F	Sig
Experiential Pedagogies	1-5 yrs (3.72)	.616	.653
	6-10 yrs (3.71)		
	11-15 yrs (3.65)		
	16-20 yrs(3.97)		
	More than 21 yrs (3.89)		

p value is significant at <0.05 level of significance

The null hypothesis that university teachers with different experience level equally use experiential pedagogies is accepted. It is found that all university teachers irrespective of the experience use experiential pedagogies.

Discussion

The findings revealed that majority of faculty members including males and females are using experiential pedagogies. It may be attributed to the awareness and promotion of experiential methods employed in many professional development programs and trainings where mostly focus is on those pedagogies where active engagement of respondents is highly demanded

and positively evaluated. Finding regarding age-wise mean difference in the use of experiential pedagogies found that university teachers of different ages have a very slight difference in the use of experiential pedagogies. The teachers of 31-40 years are found to be practicing more experiential pedagogies. It is revealed that majority of university teachers encourage experiential learning irrespective of the age difference but the level is moderate. They ensure to make their classrooms as learner-focused classrooms by considering individual differences, personality types of students, learning styles differences, and social/cultural/ethnic backgrounds of the learners.

Majority of teachers believe that process is more important than outcome, therefore they try to encourage their students to consider learning as a process and do not focus only on outcome. Majority of university teachers are found to be connecting their classroom teaching with real world problems. They relate content with practical life and encourage students to work independently so that they can learn to solve real problems at their own where teachers are just as guide or facilitator and not the sole distributer of knowledge. These teachers encourage their students to learn the concept by participating in learning process, no matter the students reach to accurate solution or answer but the learning that takes place in the process is highly appreciated by teachers.

Critical thinking of students is also enhanced by university teachers by employing experiential pedagogies. They encourage their students to establish vision that where they want to see themselves in coming years, they encourage them to set their own objectives, critically analyze the opportunities and decide that what is better for them and how they can achieve maximum by setting their own pace and choosing best from different alternatives. The teachers have given their point of view that traditional pedagogies which are one-fits all approaches only guarantee good marks in theoretical examination and do not

prepare for real world problems and their creative solutions. Teachers have favored group discussions and case studies where students can share their experiences for solving the particular problems.

Teachers engage their students in their own capacity, available resources and available time in the Presentations, Research work, problem-solving methods, simulations, role play, drama, book reviews, laboratory work, field trips, and visits to factories. They also relate the content with real world examples. They discuss case studies and ask for creative solutions of the problems

Conclusions

Experiential learning is the need of the time. It is the cure of many ailments of education system. It creates interest of the learner in the task, accelerates learning, develops critical thinking and helps in achieving learning objectives in a better way. It has a lot of benefits over one-fits all learning. Although teachers incorporate experiential learning but it is done as a piece-meal approach and not in a fully planned fashion. It is used in combination with traditional approaches. There are many obstacles in fully transforming the learning from traditional to experiential learning. Financial constraints, time constraints, strict examination and evaluation policies, present security conditions, and lack of training in experiential pedagogies are some barriers which do not allow to fully implementing experiential learning. There is the great need to understand the changing needs of the professions and job market and replace the traditional one-size-fits all learning with experiential learning.

References

Calas, M. (1979). Experiential Vs. traditional classroom approaches in the basic management course: A Peurto Rican experience. *Insight into Experiential Pedagogy. Vol. 6.*

Dressler, S., Cedercreutz, K., &Pacheco, A. (2011). Strengthening curriculum through student learning outcome assessment in experiential learning. *Journal of Hospitality & Tourism Education*, 23(2), 41–47.

Estes, C.A. (2004). Promoting student-centered learning in experiential education. *Journal of Experiential Education*, 27(2), 141–160.

Kendall, J., Duley, J., Little, T., Permaul, J., &Rubin, S. (1986). *Strengthening experiential education within your institution*. Raleigh, NC: National Society for Internships and Experiential Education.

Kolb, D. A. (1984). *Experiential learning: Experience as a source of learning*. Englewood Cliffs, NJ: Prentice Hall.

Kishore, G. (2014). *Experiential learning vs. traditional learning methodologies*. Knolscape https://www.knolskape.com/.../experiential-learning-methodologies-vs-tr...

Pugsley K.E, & Clayton L.H.(2003). Traditional lecture or experiential learning: Changing student attitudes. *Journal of Nursing Education*. Nov;42(11):520-530

Rea, J. (2014). *Experiential learning versus the traditional classroom*. Jayhawks abroad .www.jayhawksabroad.dept.ku.edu/general.../**experiential-learning-versus**...

Ruhanen, L. (2005). Bridging the divide between theory and practice: Experience learning approaches for tourism and hospitality management education. *Journal of Teaching in Travel & Tourism*, 5(4), 33–51.

Specht, L.B, & Sandlin, P.K. (1990). A Comparison of the effects of experiential learning activities and traditional lecture class. *Developments in Business Simulation & Experiential Exercises. Vol .17.*

Specht, L.B, & Sandlin, P.K. (1991). The differential effects of experiential learning activities and traditional lecture classes in accounting. *Simulation and Gaming. 22(2).*

Weltman D, and Whiteside, M. (2010).Comparing the effectiveness of traditional and active learning methods in business statistics: Convergence to the mean. *Journal of Statistics Education.18* (1)